Military Perspective
Counties and Military Working Together

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NAVAIR Ranges
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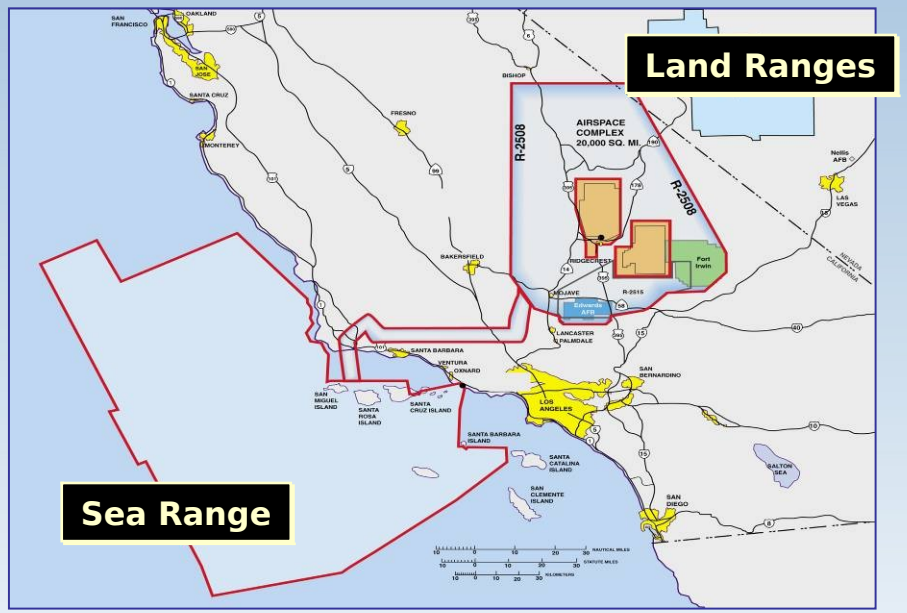
Outline

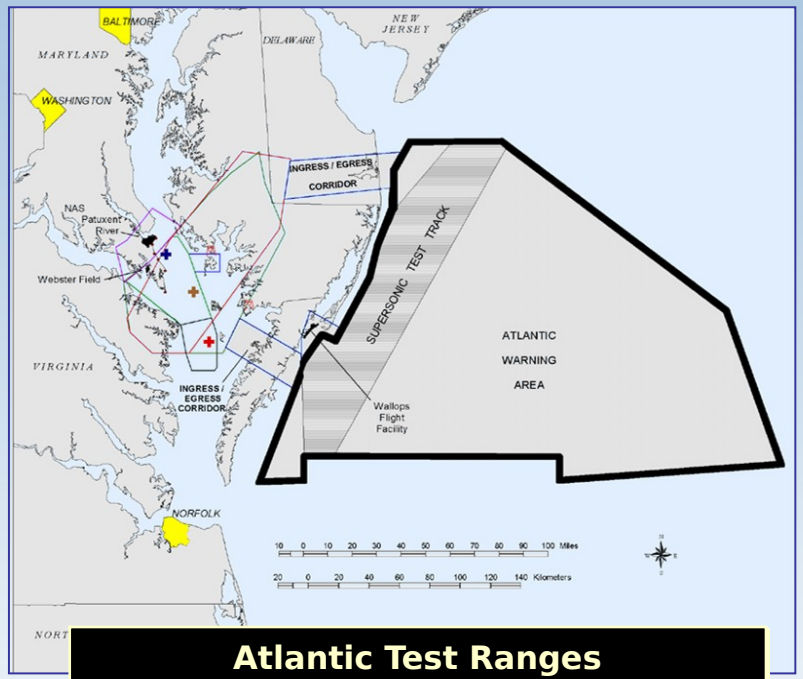
- NAVAIR Ranges & R-2508 Overview
- Wind Generating Energy Facilities
- Red-Yellow-Green Strategy
- Other Tools

NAVAIR Ranges

Pacific Ranges

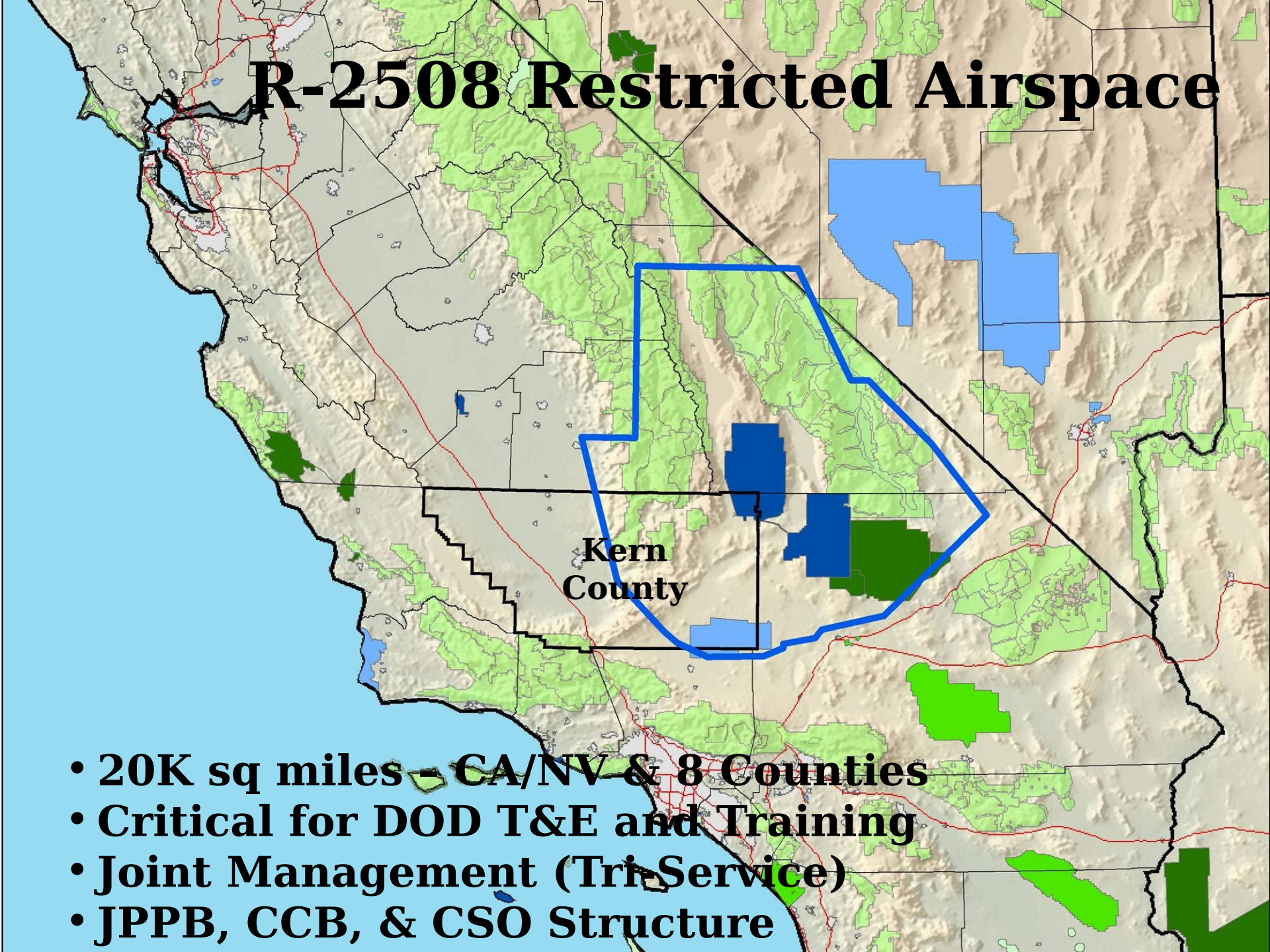


Atlantic Ranges

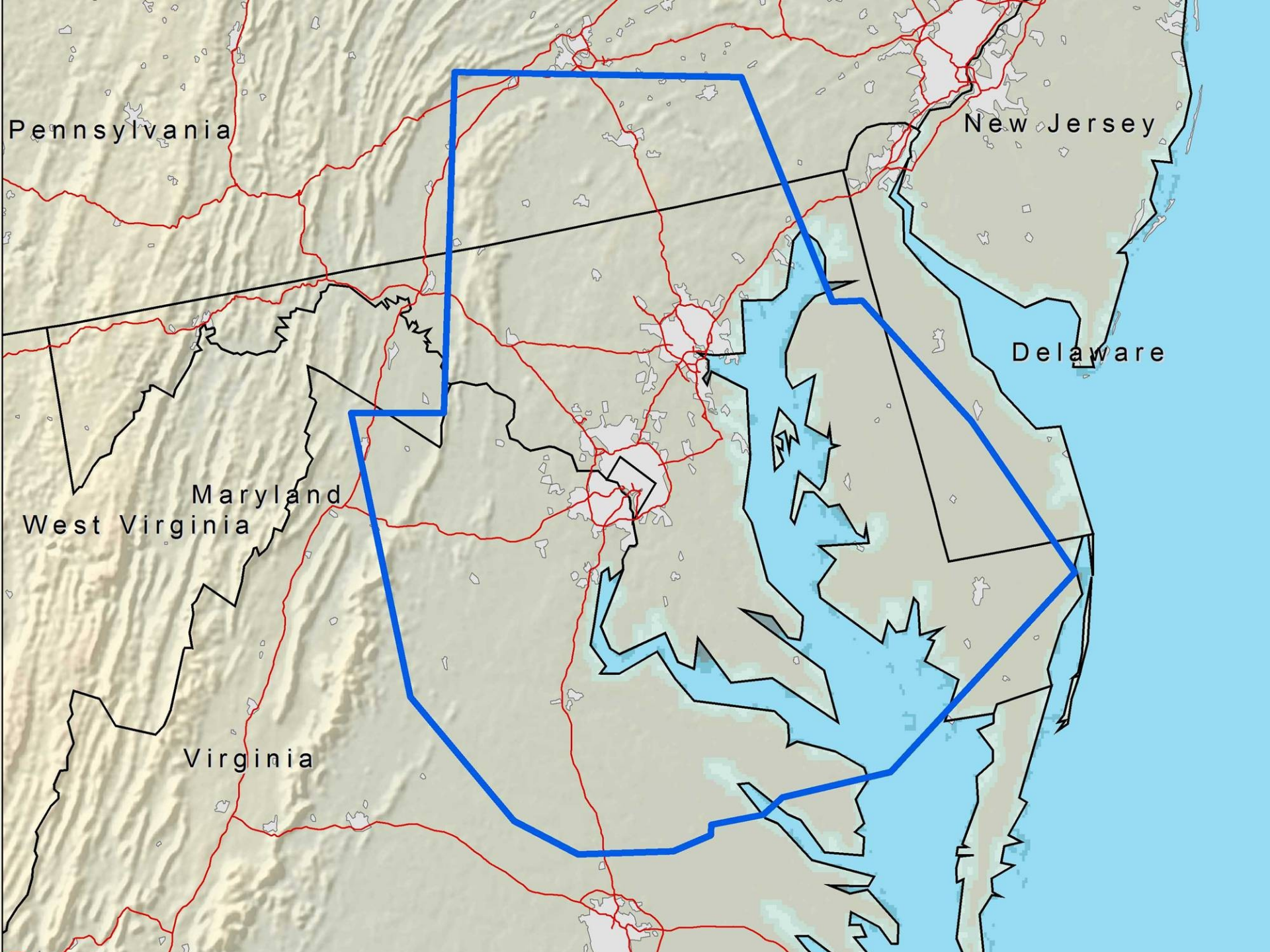


Atlantic Test Ranges
- **Chesapeake Test Range**
- **Atlantic (Off-Shore) Warning Areas**

R-2508 Restricted Airspace



- 20K sq miles – CA/NV & 8 Counties
- Critical for DOD T&E and Training
- Joint Management (Tri-Service)
- JPPB, CCB, & CSO Structure


Pennsylvania
New Jersey
Delaware
Maryland
West Virginia
Virginia

Current Sustainability Issues

- Same as the rest of DoD
  - Frequency Conflicts, Towers, Environmental Pressures, Airspace Conflicts, Noise Complaints, Population Growth & Commercial Development
- VERY Heavy Wind Energy Development
  - Wind Turbines Create Two Issues – Obstruction & Radar Interference
  - Thousands of Structures in Region
    - Latest Proposals > 400’
  - Creative Solution to Reduce Friction Between DoD & Wind Industry
    - Red-Yellow-Green Mapping

Existing Kern County Tools

- Automatic notification and comment
- Airport Land Use Compatibility Plan (ALUCP)—Military Aviation Section
- Project Specific Collaboration
- Industry Collaboration
- Zoning ordinance contains specific requirements for notification and maps of height limitations

Wind Farms & Military Ops

Two Primary Issues

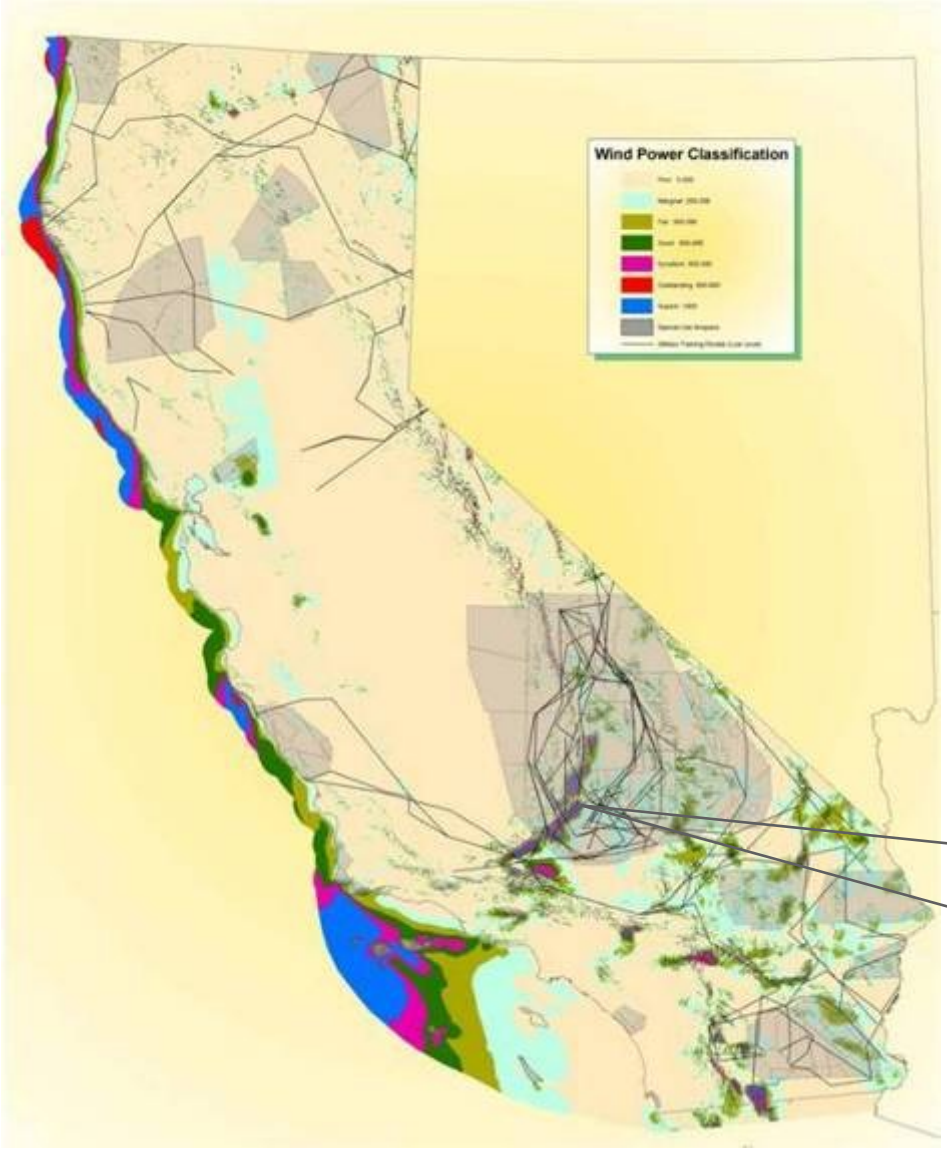
Obstruction

Radar Interference

Radar Interference

- Airborne Radar
  - Problems for Radar Flight Test, Windmills Corrupt R-2508 Unique Test Environment
  - Windmill Towers, Generators and Props Reflect Radar Energy and are a Source of Interference to the Radar
  - Rotation of Blades are a Source of Doppler Clutter
  - Windmills Do Not Have to be in the Direct flight Path of the Aircraft or Antenna Pointing Direction to be a Source of Interference
- Ground Based Radar
  - DoD/DHS Policy
    - Windmills can impact National Air Defense & Homeland Security Radars

Competition for Resources



Competing Resources

Significant Wind Resources

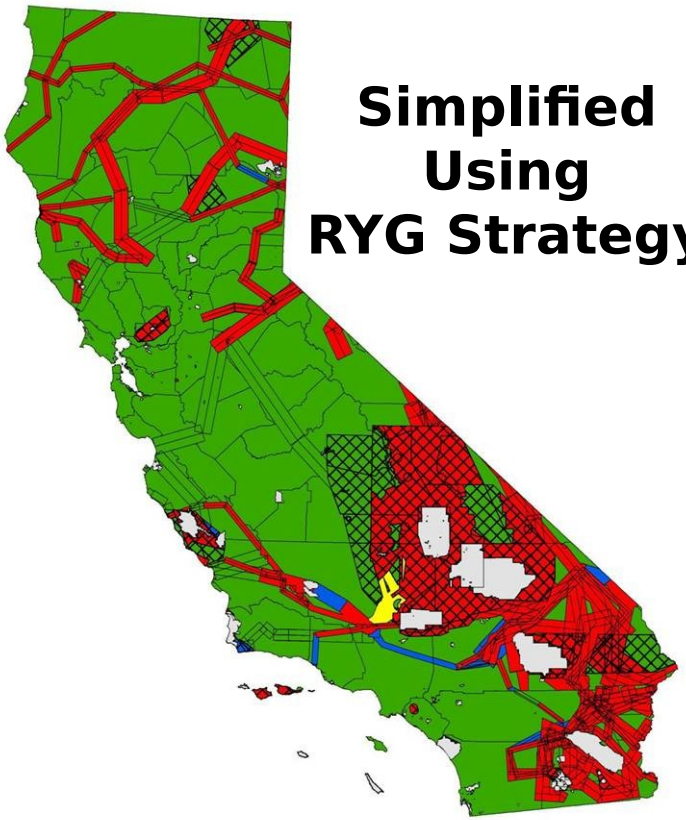
Critical Military Operating Area

Tehachapi Wind Resource Area

~~700~~

4,000MW

Military Mission in CA



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RYG Simplification

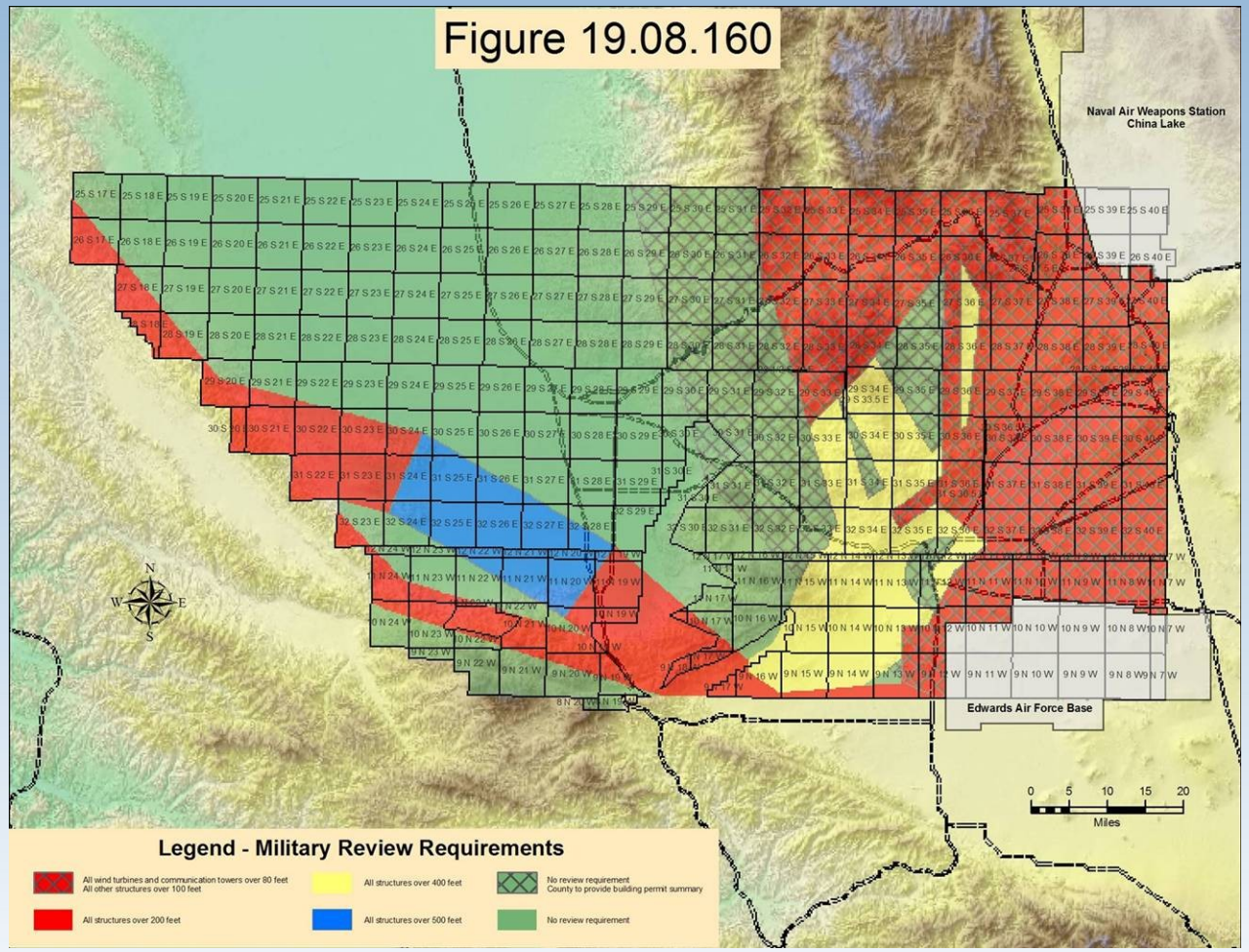
Figure 19.08.160
Naval Air Weapons Station China Lake
Edwards Air Force Base
0 5 10 15 20
Miles
Legend - Military Review Requirements
All wind turbines and communication towers over 80 feet
All other structures over 100 feet
All structures over 200 feet
All structures over 400 feet
All structures over 500 feet
No review requirement
County to provide building permit summary
No review requirement

Many Bases have operations FAR from the Fence-line!!

Kern County Zoning Ordinance

- Title 19 ZONING
  - Chapter 19.08 INTERPRETATION AND GENERAL STANDARDS
    - 19.08.160 Height of structures.
- http://ordlink.com/codes/kerncoun

RYG Implementation Status

- Military
  - Navy
  - Air Force
  - USMC
  - DoD Wind Work Group
- Counties
  - Kern
  - LA
  - San Bernardino
  - Ventura
- Bureau of Land Management
- National Forest Service
- Other States & National

Why Do It?

- Protects our CRITICAL Operating Areas
- Reduces Friction Within Region
- Simplifies Issue
- Reduces Workload
- Provides Model for Other Counties and/or Regions

RYG Lessons Learned

- Early Engagement with Project Proponents and Industry Associations
- Robust GIS
- Regional Engagement (Joint DoD) with Land Use Decision Makers
- Dedicated DoD Lead (Physically Located in the Area)
- ID & collaborate with stakeholders

Other Tools

- Office of Economic Adjustment
  - Joint Land Use Study Program
    - http://www.oea.gov/oeaweb.nsf/Encroachment
  - Handbook for Compatible Development
    - http://www.oea.gov/oeaweb.nsf/PG

- CA Office of Planning & Research
  - Advisory Handbook
  - Military Notification
  - Joint Land Use Studies
    - http://www.opr.ca.gov/

Other Tools

- Department of Defense 101
  - Introduction to DOD
    - http://www.defenselink.mil/pubs/dod101

- Acronym Finder
  - We are acronym-o-holics!!
  - Decipher their terms
    - http://www.acronymfinder.com/

Questions?